Claims:

1. A method of performing an information transformation on one or more input information objects within a communications network, the method including:
receiving as an input to said information transformation one or more said input information objects and producing an output including one or more output information objects;
determining for each input information object a unique identifier for that input information object;
providing in the content of said one or more output information objects tracking information from which the unique identifier of each information object received as an input to said information transformation is determinable.

2. The method of claim 1, wherein at least selected information objects include protected information including one or more protection measures to prevent or notify of any unauthorised modification or deletion of said protected information and wherein said unique identifier is determined dependent on said protected information.

3. The method of claim 1 further including providing in the content of said one or more output information objects, information that uniquely identifies said information transformation.

4. The method of claim 2, further including providing said tracking information within a protected part of said one or more output information objects.

5. The method of claim 4, wherein said tracking information forms part of the protected information used for determining said unique identifier.

6. The method of claim 5, including determining said unique identifier by performing a hash computation on said protected information.

7. The method of claim 1, wherein said tracking information is time-invariant.

8. The method of claim 1 further including providing one or more resource indicators within or associated with said one or more output information objects that identifies where or how said one or more input information objects may be found within the network.

9. The method of claim 8, wherein said one ore more resource indicators includes a reference to a specific namespace that the one or more input information objects is located.

10. The method of claim 8, wherein said resource indicator includes a reference to a specific location of the one or more input information objects.

11. The method of claim 8 further including providing one or more resource indicators within or associated with said one or more output information objects that identifies where or how said information transformation may be found within the network.

12. The method of claim 1 further including recording with each said input information object a unique identifier of each output information object.

13. The method of claim 1 further including storing in a storage means locations of copies of information objects and providing one or more locations to a user upon request.

14. The method of claim 13 further including storing in said storage means the unique identifiers of each information object and providing to said user with said one or more locations the unique identifier of the information objects that the locations refer to.

15. The method of claim 14 further including providing to said user the location of a copy of an information that is relatively easily accessible to that user when more than one copy is available.

16. Apparatus for information object transformation within a communications network, the apparatus including:
processing means including one or more input means and at least one output means for receiving and outputting one or more information objects to and from a communications network respectively; and
storage means readable by said processing means and storing instructions to cause said processing means to transform information objects received at said input means, produce one or more output information objects at said output means and include within the content of the or each output information object tracking information that uniquely identifies all said information objects received at said input means.

17. The apparatus of claim 16, wherein said storage means further includes instructions to cause said processing means to include information that uniquely identifies the information transformation within said tracking information.

18. The apparatus of claim 16, wherein said storage means further includes instructions to cause said processing means to protect predetermined information within said output information object and include within said predetermined information said tracking information.

19. The apparatus of claim 16, wherein said storage means further includes instructions to cause said processing means to include within said tracking information a resource indicator that specifies a context of said input information objects for use in identifying where or how said input information objects may be found within the network.

20. The apparatus of claim 19, wherein said resource indicator includes a reference to a specific namespace that an information object is associated with.

21. The apparatus of claim 19, wherein said resource indicator includes a reference to a specific location of the information object within a network.

22. A computer program for performing an information transformation on one or more input information objects the computer program including instructions to cause a computer processing means to receive said one or more input information objects, produce one or more output information objects and include within the content of the or each output information object tracking information that uniquely identifies all said received information objects.

23. The computer program of claim 22, further including instructions to cause said computer processing means to include a reference to the logical location of said input information objects within or associated with each output information object.

24. Apparatus for providing directions to a user where to obtain a copy of an information object in a communications network when multiple copies exist, the apparatus including:
means to record the location of copies of said information object within said communications network and record a unique identifier associated with the information object; and
means to provide information referring to a network location of at least one copy of the information object together with said unique identifier to said user upon request from the user.

25. The apparatus of claim 24 wherein said means to provide information referring to a network location of at least one copy of the information object includes means to evaluate and send a conveniently located copy for said user.

26. A system for locating a copy of a required information object within a communications network including:
means to record the location of copies of said required information object within said communications network and provide information referring to a network location of at least one copy upon request;
information object retrieval means for retrieving a copy said

required information object from said network location; and processing means to compute a first unique identifier of said required information object based on the content of a retrieved copy of said required information object and compare said unique identifier with a second unique identifier computed from the required document.

27. The system of claim 26, wherein said means to record the location of copies of said required information object records a unique identifier of each information object that it records the location of copies of and supplies said unique identifier when providing information referring to a network location of a copy of an information object.

28. In combination in a computer network, the apparatus of claim 16 and the apparatus of claim 24.

29. A method of providing for the tracking of the transformation of information objects within a communications network, the method including using the content of each input information object to a transformation to compute a unique identifier for that input information object and including each computed unique identifier in the content of each output information object from said transformation so that each said unique identifier can be determined from each said output information object.

30. The method of claim 29, further including computing and storing a unique identifier for each output information object, wherein the stored unique identifiers are associated with each input information object.

31. The method of claim 29 when used in a peer-to-peer network environment.